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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/994,839	11/28/2001	Jae Kyung Lee	P-0288	8445
34610	7590	02/10/2005	EXAMINER	
FLESHNER & KIM, LLP P.O. BOX 221200 CHANTILLY, VA 20153			ZHOU, TING	
			ART UNIT	PAPER NUMBER
			2173	

DATE MAILED: 02/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/994,839

Applicant(s)

LEE, JAE KYUNG

Examiner

Ting Zhou

Art Unit

2173

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. The amendment filed on 15 November 2004 have been received and entered. The applicant has added new claims 19-20. Claims 1-20 as amended are now pending in the application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vazquez et al. in the article titled "Supporting Flexible Assembly Through Human Factors", published in the *PROCEEDINGS of the HUMAN FACTORS AND ERGONOMICS SOCIETY 41st ANNUAL MEETING* in 1997, and Perlman U.S. Patent 6,829,779.

Referring to claim 1, Vazquez et al. teach a method comprising determining whether a selection key signal for display of the user's manual is input (operator selection of product to be assembled via a mouse input) (Vazquez et al.: page 562, step 1 under section entitled *Software Interface*); graphically displaying the product having a plurality of parts, or assembly components, according to the selection key signal (providing directions and illustrations on the operations of the assembly of the product) (Vazquez et al.: abstract on page 561 and passages under the sections *Apparatus* and *Software Interface* on page 562); successively displaying

portions of the user's manual corresponding to respective parts of the assembly product in an initial predetermined display order (providing assembly instructions and illustrations in their executable order) (Vazquez et al.: page 562, step 4 under section entitled *Software Interface*); interrupting the initial predetermined display order upon a selection of at least one part of the product by a user input and displaying portions of the user's manual corresponding to the at least one part of the assembly product (at any time, the user can interrupt the executable order of the directions and illustrations by selecting to view a full-screen picture of all the assembly components or a full-screen picture of the completed assemblage) (Vazquez et al.: page 562, steps 1-6 under section entitled *Software Interface*). However, Vazquez et al. fail to explicitly teach the assembled product being a video apparatus having a plurality of parts. Perlman teaches a graphical user interface that displays directions and illustrations for assembling, or setting up a product (Perlman: column 4, lines 49-67) similar to that of Vazquez et al. In addition, Perlman further teaches assembling a video apparatus having a plurality of parts (displaying setup instructions for interconnecting a plurality of consumer electronics devices) (Perlman: column 4, line 49 - column 5, line 29 and Figures 1-6). It would have been obvious to one of ordinary skill in the art, having the teachings of Vazquez et al. and Perlman before him at the time the invention was made, to modify the interface for graphically displaying instructions for assembling a product of Vazquez et al. to include the graphical display of setup instructions for connecting consumer electronics devices taught by Perlman. One would have been motivated to make such a combination in order to deliver interactive instructions for setting up and connecting various consumer devices; television, which has provided a source of entertainment for millions of individuals, have moved beyond their simple traditional configurations to become the center

of a wide array of entertainment and information systems such as the VCR, DVD, video game devices, etc.; the combination of the teachings of Vazquez et al. and Perlman would allow users to easily custom configure a wide array of home entertainment and information systems in a manner that realizes the full benefits of the consumer electronics devices.

Referring to claim 2, Vazquez et al., as modified, teach the user's manual comprises images of the parts (combining the display of text with illustrations) (Vazquez et al.: abstract on page 561 and passages under the sections *Apparatus* and *Software Interface* on page 562).

Referring to claim 3, Vazquez et al., as modified, teach the user's manual comprises enlarged images of the parts (users can view an enlarged, or full-screen picture of all the assembly components and the completed assemblage) (Vazquez et al.: page 562, steps 2-3 under section entitled *Software Interface*).

Referring to claim 4, Vazquez et al., as modified, teach the parts of the video apparatus comprise a connector for connecting to a peripheral apparatus including one or more input/output terminals of the video apparatus (connecting one or more peripheral apparatuses, or consumer electronics devices to the Internet or television terminal via a connection to the input/output, or Line In/Line Out connectors of the terminals) (Perlman: column 4, line 49 - column 5, line 29, column 8, lines 36-45 and Figures 1-6).

Referring to claim 5, Vazquez et al., as modified, teach when an enter-key signal is input while portions of the user's manual corresponding to the connector are displayed, an operating mode of the video apparatus is adapted to operate the peripheral apparatus (when signal of the consumer establishing the graphically instructed connection is received, the connected consumer electronics device can be operated to determine whether the connection is fully established and

the device fully functional) (Perlman: column 5, lines 15-29 and column 9, line 43 – column 10, line 39).

Referring to claim 6, Vazquez et al., as modified, teach parts of the video apparatus comprises a manipulation portion of the video apparatus (connection instructions for portions of the terminals used to manipulate the devices, such as the Line In/Line Out connectors) (Perlman: column 4, line 49 - column 5, line 29, column 8, lines 36-45 and Figures 1-6).

Referring to claim 7, Vazquez et al. teach a method comprising (a) determining whether a selection key signal for display of an instruction manual is input by a user (operator selection of product to be assembled via a mouse input) (Vazquez et al.: page 562, step 1 under section entitled *Software Interface*); and (b) graphically displaying multiple images of predetermined portions of an assembly product according to the selection key signal (providing directions and illustrations on the operations for the assembly of the product) (Vazquez et al.: abstract on page 561 and passages under the sections *Apparatus* and *Software Interface* on page 562), and graphically and sequentially displaying corresponding portions of the instruction manual of a method for assembling the product (providing the directions and illustrations for the operation of assembling the product sequentially, i.e. in their executable order) (Vazquez et al.: page 562, step 4 under section entitled *Software Interface*). However, Vazquez et al. fail to explicitly teach displaying images of at least one peripheral apparatus according to the selection key signal and graphically displaying instructions for connecting a video apparatus to at least one peripheral apparatus. Perlman teaches a graphical user interface that displays directions and illustrations for assembling, or setting up a product (Perlman: column 4, lines 49-67) similar to that of Vazquez et al. In addition, Perlman further teaches displaying images of at least one peripheral apparatus

according to the selection key signal and graphically displaying instructions for connecting a video apparatus to at least one peripheral apparatus (displaying instructions, including text and/or graphical images, describing the proper way to connect a peripheral device, such as consumer electronics devices like a VCR, to the internet, or television terminal) (Perlman: column 4, line 49 - column 5, line 29, column 8, lines 35-67, column 9, line 43 – column 10, line 39 and Figures 1-6). It would have been obvious to one of ordinary skill in the art, having the teachings of Vazquez et al. and Perlman before him at the time the invention was made, to modify the interface for graphically displaying instructions for assembling a product of Vazquez et al. to include the graphical display of setup instructions for connecting consumer electronics devices taught by Perlman. One would have been motivated to make such a combination in order to deliver interactive instructions for setting up and connecting various consumer devices; television, which has provided a source of entertainment for millions of individuals, have moved beyond their simple traditional configurations to become the center of a wide array of entertainment and information systems such as the VCR, DVD, video games devices, etc.; the combination of the teachings of Vazquez et al. and Perlman would allow users to easily custom configure a wide array of home entertainment and information systems in a manner that realizes the full benefits of the consumer electronics devices.

Referring to claim 8, Vazquez et al., as modified, teach marking at least one image of the predetermined portion of the video apparatus (Vazquez et al.: column 4, line 49 - column 5, line 29) and enlarging the at least one image (displaying an enlarged, or full-screen picture of all the assembly components of a full-screen picture of the completed assemblage according to operator selection) (Vazquez et al.: page 562, steps 2-3 under section entitled *Software Interface*).

Referring to claim 9, Vazquez et al., as modified, teach step (b) is halted when a user selects at least one portion of the video apparatus for display (at any time, the user can interrupt the executable order of the display of directions and illustrations by selecting to view a full-screen picture of all the assembly components or a full-screen picture of the completed assemblage) (Vazquez et al.: page 562, steps 1-6 under section entitled *Software Interface*).

Referring to claim 10, Vazquez et al., as modified, teach the predetermined portion of the video apparatus comprise a connector including at least one input/output terminal of the video apparatus for connecting to the at least one peripheral apparatus (connecting one or more peripheral apparatuses, or consumer electronics devices to the Internet or television terminal via a connection to the input/output, or Line In/Line Out connectors of the terminals) (Perlman: column 4, line 49 - column 5, line 29, column 8, lines 36-45 and Figures 1-6).

Referring to claim 11, Vazquez et al., as modified, teach when a signal is input by the user while a portion of the reference manual corresponding to the at least input/output terminal connector is displayed, an operating mode of the video apparatus is adopted to operate the at least one peripheral apparatus (when signal of the consumer establishing the graphically instructed connection is received, the connected consumer electronics device can be operated to determine whether the connection is fully established and the device fully functional) (Perlman: column 5, lines 15-29 and column 9, line 43 – column 10, line 39).

Referring to claim 12, Vazquez et al., as modified, teach at least one predetermined portion of the video apparatus is a manipulation portion of the video apparatus (connection instructions for portions of the terminals used to manipulate the devices, such as the Line In/Line

Out connectors) (Perlman: column 4, line 49 - column 5, line 29, column 8, lines 36-45 and Figures 1-6).

Referring to claim 13, Vazquez et al. teach an apparatus comprising a manual of a method for assembling a product and graphically displaying images of predetermined portions of the product (GUI-based system providing interactive assembly instructions and illustrations of components of the user selected product); a microcomputer for receiving a manual selection key signal received from a user and outputting a control signal (operator selection of product to be assembled via a mouse input and consequently outputting the directions and illustrations corresponding with the selected product) (Vazquez et al.: page 562, steps 1-6 under section entitled *Software Interface*); and a manual display unit for graphically displaying portions of the manual in a predetermined sequence on the screen of the GUI-based system according to the control signal wherein the control signal sets the predetermined sequence (when a control signal of user selection of a product for assembly is received, the directions and illustrations on the assembly operations for the product is displayed in an executable order) (Vazquez et al.: abstract on page 561 and passages under the sections *Apparatus* and *Software Interface* on page 562). However, Vazquez et al. fail to explicitly teach a manual data storage unit for storing manual data including the manual of a method for connecting the video apparatus to at least one peripheral apparatus. Perlman teaches a graphical user interface that displays directions and illustrations for assembling, or setting up a product (Perlman: column 4, lines 49-67) similar to that of Vazquez et al. In addition, Perlman further teaches a manual data storage unit for storing manual data including the manual of a method for connecting a video apparatus to at least one peripheral apparatus and graphically displaying images of predetermined portions of the video

apparatus (an instructions repository, or storage database, storing instructions for connecting any of a large number of consumer electronics devices to the Internet terminal or television and displaying instructions, including text and/or graphical images, describing the proper way to connect a user-identified peripheral device, such as a consumer electronics device like a VCR, to the internet, or television terminal) (Perlman: column 4, line 49 - column 5, line 29, column 8, lines 35-67, column 9, line 43 – column 10, line 39 and Figures 1-6). It would have been obvious to one of ordinary skill in the art, having the teachings of Vazquez et al. and Perlman before him at the time the invention was made, to modify the interface for graphically displaying instructions for assembling a product of Vazquez et al. to include the graphical display of setup instructions for connecting consumer electronics devices taught by Perlman. One would have been motivated to make such a combination in order to deliver interactive instructions for setting up and connecting various consumer devices; television, which has provided a source of entertainment for millions of individuals, have moved beyond their simple traditional configurations to become the center of a wide array of entertainment and information systems such as the VCR, DVD, video games devices, etc.; the combination of the teachings of Vazquez et al. and Perlman would allow users to easily custom configure a wide array of home entertainment and information systems in a manner that realizes the full benefits of the consumer electronics devices.

Referring to claim 14, Vazquez et al., as modified, teach marking an image of at least one predetermined portion of the video apparatus (Vazquez et al.: column 4, line 49 - column 5, line 29) and displaying an enlarged graphic of the image on the screen of the video apparatus (displaying an enlarged, or full-screen picture of all the assembly components of a full-screen

picture of the completed assemblage according to operator selection) (Vazquez et al.: page 562, steps 2-3 under section entitled *Software Interface*).

Referring to claim 15, Vazquez et al., as modified, teach portions of the manual comprise at least one image of the at least one peripheral apparatus (Figure 5 of Perlman shows the display of images of connected peripheral devices such a cable box and a VCR).

Referring to claim 16, Vazquez et al., as modified, teach the predetermined portions of the video apparatus comprise a connector including one or more input/output terminals of the video apparatus for connecting to the at least one peripheral apparatus (connecting one or more peripheral apparatuses, or consumer electronics devices to the Internet or television terminal via a connection to the input/output, or Line In/Line Out connectors of the terminals) (Perlman: column 4, line 49 - column 5, line 29, column 8, lines 36-45 and Figures 1-6).

Referring to claim 17, Vazquez et al., as modified, teach the microcomputer, when a signal is input, adapts an operating mode of the video apparatus to operate the at least one peripheral apparatus connected to the connector (when signal of the consumer establishing the graphically instructed connection is received, the connected consumer electronics device can be operated to determine whether the connection is fully established and the device fully functional) (Perlman: column 5, lines 15-29 and column 9, line 43 – column 10, line 39).

Referring to claim 18, Vazquez et al., as modified, teach the predetermined portions of the video apparatus comprise a manipulation portion of the video apparatus (connection instructions for portions of the terminals used to manipulate the devices, such as the Line In/Line Out connectors) (Perlman: column 4, line 49 - column 5, line 29, column 8, lines 36-45 and Figures 1-6).

Referring to claims 19 and 20, Vazquez et al., as modified, teach the instruction manual comprises displaying a message in an on screen display (OSD) format (displaying on-line instructions and illustrations on the screen of a graphical user interface) (Vazquez et al.: passages under the sections *The System*, *Apparatus* and *Software Interface* on page 562; Perlman: column 5, lines 15-29).

Response to Arguments

3. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

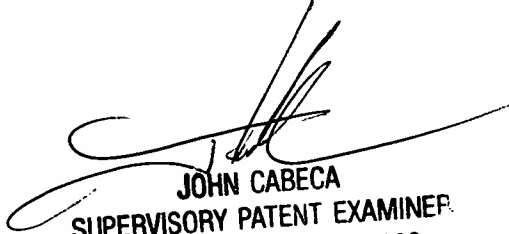
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ting Zhou whose telephone number is (571) 272-4058. The examiner can normally be reached on Monday - Friday 8:30 am - 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached at (571) 272-4048. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-4058.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

27 January 2005


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